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Remarks

Claims 2-4, 8-10, 12, 13 and 16 are pending in this application. No claims have been allowed.

The amendments to Claim 16 are supported at least by page 3, lines 25-30 and page 5, line 19 of the specification, as well as page 3, lines 17-20 and lines 20-21 of the specification. The "condensed formaldehyde/naphthalene sulfonic acid or salt thereof" language has been deleted from Claim 9 and added to Claim 16. Additional support for this amendment can be found at least on page 6, lines 17-18.

Applicants respectfully contend the amendments are fully supported by the specification in the present application and do not add new matter. Applicants request entry of these amendments as they place the claims in position for allowance or in better form for appeal.

All pending claims were rejected under 35 U.S.C. 103(a) over Boeck, et al. (AH) in view of Burton, et al. (CBB). Applicants respectfully traverse the rejection and request reconsideration. Applicants respectfully contend that a combination of Boeck, et al. and Burton, et al. does not establish a prima facie case of obviousness against the presently claimed invention. Assuming, however, for present discussion purposes only, a prima facie case of obviousness is believed to exist, Example 1 of the present specification clearly demonstrates the unobviousness and therefore patentability of the presently claimed invention.

As stated on page 2, lines 3-10 of the present specification, the inclusion of a dispersant and the ratio of active ingredient to dispersant is a unique feature of the formulations of the presently claimed invention.

Applicants respectfully contend the specification in the present case provides an important defined distinction between "dispersant" and "surfactant" that is necessary to understand so that the remarks provided in the previous amendment and as discussed below can be fully appreciated.

At page 5, line 31 through page 6, line 20, of the present specification, the term "dispersant" is discussed and defined as an agent that does not reduce the surface tension of water below 40 dynes/cm. The dispersant agents should be understood as being outside the scope of surfactants useful in the formulations of the present invention, and "surfactants" as described in the art, in that the surfactants that are useful in the present invention are defined as those that reduce the surface tension of water at or below 40 dynes/cm. As a person skilled in the art would appreciate, the surface tension properties of the "dispersants" and "surfactants" useful in the present invention and the art are separate and distinct.

As further noted on page 2 of the present specification, previous formulations

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of spinosyns with relatively low concentrations of dispersant, as compared to the higher concentrations in the present formulations, tended to lack homogeneity and predictability with respect to anticipated spinosyn concentrations upon dilution. The present formulations are limited to aqueous suspensions as distinguished from wettable powders, aqueous solutions and various other formulation types very generally described in the Boech reference.

As described in Kirk-Othmer, Encyclopedia of Chemical Technology, 4<sup>th</sup> Ed., V. 8, p. 293 (1993), Dispersants are primarily used to prevent settling (increase stability) of solid particles in a liquid media. Surfactants, in contrast, are used to stabilize liquid surfaces within another liquid. On solid particles, surfactants adsorb and wet the surface, but do not provide stable dispersions. Although the terms "dispersant" and "surfactant" are frequently used interchangeably, there are important differences between the two classes of materials that are known to those skilled in the art. For example, surfactants tend to be small molecules containing both a hydrophilic and a hydrophobic portion and are defined by the nature of the molecule. Surfactants tend to orient at the air-water interface, oil-water interface or sometimes at a liquid-solid interface depending on the length of the hydrophobic portion and the nature of the hydrophilic part. In contrast, dispersants, which tend to be larger molecules, are defined more by their use, which is to disperse a solid in a liquid.

Applicants respectfully contend the disclosure in Boech at column 25, lines 51-63, generally discloses including a surfactant chosen from those types described, presumptively applicable with respect to wettable powders. Applicants respectfully contend there is no disclosure or suggestion within the aqueous suspension, or wettable powder, disclosure of Boech, et al. of the inclusion of a dispersant having the physical properties described by Applicants in their specification and in the specified spinosad to dispersant ratios claimed by Applicants.

Applicants respectfully contend there is nothing in Boech or in Burton to suggest modifying the active ingredient to dispersant weight ratio to arrive at the particular ratio claimed by Applicants, or having the surface tension of water reduction properties for the dispersant defined by Applicants.

Applicants respectfully contend Boech does not establish a *prima facie* case of obviousness against the presently claimed invention. Applicants contend the naphthalene salt of Boech, Example 13C, in addition to being well outside the spinosad to dispersant weight ratio of 3:1 to 1:5, is also well outside of the presently claimed condensed formaldehyde/naphthalene sulfonic acid or salt thereof dispersant of the presently claimed invention.

Applicants further contend the data in Example 1 of the present specification establishes the unobvious advantages of including a dispersant within the stated ratio of the presently claimed invention assuming a *prima facie* case of obviousness is believed to exist.

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The data in Example 1 demonstrates the enhanced physical stability of the milled spinosad and dispersant containing formulations of the present invention and supports the statement at page 2, lines 11-12 of the surprising nature of the observations.

It is Applicants position that a combination of Boeck and of Burton does not establish a prima facie case of obviousness. Assuming, however, for present discussion purposes only, a prima facie case of obviousness exists, Example 1 clearly demonstrates the unobviousness of the formulations as defined and presently claimed.

In view of the amendments to the claims and the remarks made herein, Applicants respectfully request favorable reconsideration of this application.

Respectfully submitted,



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